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10/531,531	12/19/2005	Brian Graham	13801US	9102
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			KELLY, ROBERT M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/531.531 GRAHAM ET AL. Office Action Summary Examiner Art Unit ROBERT M. KELLY 1633 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 07 December 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.3-24.26-30.32.33.36-47 and 49-56 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1. 3-24, 26-30, 32, 33, 36-47, and 49-56 is/are rejected. 7) Claim(s) 1,7 and 32 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsporson's Fatont Drawing Previow (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _______.

Interview Summary (PTO-413)
 Pater No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

DETAILED ACTION

Applicant's amendment and argument of 12/7/07 are entered.

Claims 2, 25, and 31 are cancelled.

Claims 1, 7, 17, 23, 24, 47, and 49 are amended.

Claims 1, 3-24, 26-30, 32, 33, 36-47, and 49-56 are presently pending and considered.

Improper Claim Identifiers

Claim 17 has been amended, but is not labeled as such with a proper claim identifier. However, as it appears to be a typographical error, the Examiner has entered the claims nonetheless. Future improper claim amendments will be responded to with a non-compliant amendment notice.

Claim Status, Cancelled Claims

In light of the cancellation of Claims 2, 25, and 31, all rejections and/or objections to such claims of record are rendered moot, and thus, are withdrawn.

Claim Objections

Claims 1, 17 and 32 are objected to because of the following informalities:

Claim 1 recites the first recitation of an acronym: EHD. It is standard patent practice to provide the proper terminology, along with the acronym at its first recitation.

Claim 17 has been amended to recite "The process of claim 1". There is no claim "I", and hence, it is suggested to amend such recite "The process of claim 1". For purposes of compact prosecution, the claim will be considered to depend from Claim 1.

Claim 32 recites "group of earners". It is clear that the limitation should recite "group of earriers".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In light of the amendments and argument, the rejections of Claims 7 and 14, for lacking clarity, are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5-9, 12-24, 26-30, 32, 37-47, and 49-56 remain rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to Maget, and 4,334,504 to Matthews, for reasons of record.

Applicant's amendments include incorporation of the previous limitations of Claim 2, 25, and 31 into their independent claims. However, such EHD is the subject matter previously used to reject the claims.

Coffee '517 teaches single-nozzle EHD delivery devices for delivery of substances by spray into the respiratory tract (e.g., ABSTRACT) and further, to avoid the lower respiratory tract of humans, particles should be 10 microns or above, and Coffee '877 teaches dual-nozzle devices for similar delivery of substances (e.g., ABSTRACT).

Maget 194 teaches a liquid spray dispenser for dispensing, *inter alia*, insecticides and therapeutics transdermally to horses (e.g., ABSTRACT, EXAMPLE 3).

Matthews '504 teaches an animal spraying apparatus, which applies liquids to the surface of the animal as it moves back and forth through the passageway (e.g., ABSTRACT).

Hence, at the time of invention, it would have been obvious to apply the Mathews '504 apparatus, in combination with the EHD delivery device(s) of Coffee, and do so to horses, as further taught in Matthews. Because the references teach similar methods of spraying animals to obtain various therapeutic and cosmetic alterations, it would have been obvious to the Artisan to utilize any combination of these elements to provide the predictable result of distributing one or more therapeutics and/or cosmetics to the animal without allowing the particles to enter the lower respiratory tract of humans.

With regard to the distribution and standard deviation requirements of Claim 8, because the mechanics of fluid flow, nozzle size, and the relation to droplet size are understood and controllable to the artisan (this is official notice), absent reason to believe otherwise, the Artisan would necessarily obtain such distributions, in order to deliver more uniform products.

With regard to the curved trajectories, the fluids are influenced by gravity, and hence achieve the same planar distribution along the curved surfaces of the animal. Still further, the wraparound effect is necessarily present (e.g., Applicant's FIGURE 2b).

With regard to avoiding dermatitis, etc., the Artisan would necessarily do so in order to avoid negatively affecting the animal.

With regard to alternating the discharges, and opposite charges, the Artisan would simply find such to be design choice, and alternating the charges would be obvious as it allows the dispersed substances to attract each other on the surface of the animal.

With regard to the acoustic emission, the discharge of liquid necessarily would cause sound to be generated.

With regard to using a handheld device, the Artisan would also find such obvious, as it has been done at small farms for many years. E.g., horse owners have for many years applied sprays to control insects, mites, fungi, and other pests from growth on their horses, and they have no need for a large device, such as that of Matthews, and still further Applicant's own application admits that such applications are known in the prior art (e.g., FIGURE 1).

Response to Argument – Obviousness, Coffee '877, Coffee '194, Maget, and Matthews

Applicant's argument of 12/7/07 has been fully considered but is not found persuasive.

Applicant argues that the purpose of Coffee '877 is to form uncharged droplets, and Dvorsky also teaches such, and as such, obviousness is not found (p. 10, paragraph 1).

Such is not persuasive. Coffee '877 teaches, inter alia, uncharged droplets, but also teaches a controlled charge application for the droplets. Still further, they are made during the process of being applied to the animal, and, in fact, the droplets are taught to be charged, and

such charge is used to direct the trajectory of the droplets. To wit, the charge of the droplets can be controlled (col. 3, paragraph 6). Hence, the droplets applied may be charged. Further, the droplets are charged, shot out the nozzle(s) by such charge, and allowed to mix during application or at the application site (e.g., col. 4, paragraph 2). Still further, Applicant's own dependent claims teach creating uncharged droplets, which certainly may be created during ejection from the nozzles, and hence, Applicant's argument appears to be in conflict with the invnetion. Still further, it is well known that EHD creates charged particles, not uncharged, and the Artisan, as shown in the Art cited, would necessarily understand that you do not create uncharged particles for ejection, but charged particles, however, by admixing opposite charges you can neutralize or adjust the net charge. Applicant's invention is clearly not using EHD to create charged particles, but Appears to lie in the belief that the Artisan would not use EHD in applications for applying various paints to animals. (It should be noted that the term "paint" is usually applied as anything sprayed onto the surface of the animal, and hence the Examiner is not using the word paint to be limited to application of paints of color.)

Applicant argues that the references do not teach application of the substance to fur, feathers, scales, wool (p. 10, paragraph 1).

Such is not persuasive. The art is taken within the knowledge and skill of the Artisan, and the Artisan, as shown above and previously, understands the need to apply such substances to animals, including horses. Even further, as Applicant has admitted in their specification, such applications of substances to these animals are known in the Art (ABOVE and in previous Official Action).

Applicant argues that Maget is limited to gas-pressure devices, and hence the rejection is improper (p. 10, last paragraph).

Such is not persuasive. Maget is not being applied as reference for anticipation. Maget provides the motivation to apply substances to animals.

Applicant argues that Matthews does not EHD or charged particles (p. 11, paragraph 1).

Such is not persuasive. Matthews is not being used under anticipation. Matthews shows the general device to apply substances while animals move through the passageway. The interchangeability of one dispensing apparatus for another is considered obvious, as the Art demonstrates the effect of administration by either method of ejection of material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5-24, 26-30, 32, 33, 37-47, and 49-56 remain rejected under 35

U.S.C. 103(a) as being unpatentable over U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877

to Coffee, et al., 5,928,194 to Maget, and 4,334,504 to Matthews as applied to claims 1, 3, 5-9,

12-24, 26-30, 32, 37-47, and 49-56 above, and further in view of U.S. Patent Nos. 6,029,610 to

Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo, for reasons of record.

As shown above, the Coffee, Maget and Matthews patents make obvious the various aspects of the previously-rejected claims, however, the do not make obvious the use of surfactant carriers or the use of a combination of a neonicotinoid and a pyrethroid.

On the other hand, Ramsey teaches washing animals in a similar device with shampoos which may include a surfactant (e.g., ABSTRACT; col. 3, paragraph 2).

Further, Sembo '017 teaches the use of ectoparasite controlling agents, which are neonicotinoids, for treatment of animals externally (e.g., ABSTRACT and col. 1, paragraph 5) and Franklin '253 teaches the use of pyrethroids for treatment of animals by inter alia sprays (e.g., ABSTRACT).

Hence, it would be obvious to include the shampoos of Ramsey at the same time and include the pyrethroids and neonicotinoids of Sembo and Franklin. The Artisan would have been motivated to do so in order to clean the animal. Moreover, the artisan would have expected success, as Ramsey, Sembo and Franklin teach that it can be done this way to clean the animals.

Response to Argument – Obvousness, Matthews '877, Matthews '194, Coffee, Maget,

Matthews, Ramsey, Franklin, and Sembo

Applicant's argument of 12/7/07 has been fully considered but is not found persuasive.

Applicant argues that Ramsey is not EHD, and does not form charged particles, and is not intended for transdermal use (p. 11, paragraph 3).

Such is not persuasive. Ramsey teaches washing animals with shampoos. The organic carriers are not required to be the therapeutic agent. As shown above, Maget teaches the transfermal delivery of therapeutics. Further, the other references teach the use of EHD for

Art Unit: 1633

delivery of substances. Hence, it would be obvious to use EHD and use the combinations of substances for delivery to the animals.

Applicant argues that Franklin does not teach EHD and are not intended for transfermal delivery (p. 11, last paragraph).

Such is not persuasive. Franklin teaches delivery of the substances, the other references teach the use of EHD for similar delivery techniques, and Maget teaches the transdermal delivery of substances. Hence, the claims are still obvious.

Applicant argues that Sembo is not EHD, and transdermal delivery is not designed for Sembo's substances (p. 12, paragraph 1).

Such is not persuasive. Sembo teaches delivery of the substances, the other references teach the use of EHD for similar delivery techniques, and Maget teaches the transdermal delivery of substances. Hence, the claims are still obvious.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 12-22, 41-46 and 52 remain rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to Maget, and 4,334,504 to Matthews as applied to claims 1, 3, 5-9, 12-24, 26-30, 32.

Art Unit: 1633

37-47, and 49-56 above, and further in view of U.S. Patent No. 6,302,331 to Dvorsky, for reasons of record.

As shown above, the Coffee, Maget and Matthews patents make obvious the various aspects of the previously-rejected claims, however, the do not make obvious the use of an EHD device to deliver an uncharged particle.

On the other hand, Dvorsky teaches the use of such to deliver uncharged particles (e.g., col. 4, paragraph 3).

Hence, at the time of invention, it would have been obvious to further modify the methods to deliver an uncharged particle via EHD. The Artisan would have done so, as it is merely one of design choice. Moreover, the artisan would have had a reasonable expectation of success, as Dvorsky teaches it can be done.

Response to Argument – Obvousness, Matthews '877, Matthews '194, Coffee, Maget,

Matthews, Ramsey, Franklin, Sembo, and Dvorsky

Applicant's argument of 12/7/07 has been fully considered but is not found persuasive.

Applicant argues that Dvorsky teaches non-charged droplets, and hence, teaches away from the invention, and further does not teach transdermal delivery (p. 12, paragraph 2).

Such is not persuasive. Dvorsky teaches the uncharged particles. Further, as in Coffee '877, uncharged particles may be formed during the delivery trajectory to the animal (e.g., ABSTRACT). Moreover, such is completely inconsistent with Applicant's main arguments against Coffee '877 (Applicant's argument of 12/7/07, p. 11, paragraph 2).

Art Unit: 1633

Applicant argues, in addition to rehashing the other arguments above, that the Artisan would have no reason to abandon the methods known in the Art to use EHD, other than hindsight (p. 12, paragraph 3).

Such is not persuasive. EHD, as shown in these references is another method to evolve a spray to apply substances. As shown in the references, it has been applied as a paint, as a cosmetic, and a therapeutic, under various circumstances. Hence, given the fact that the method effects the same methods as those known in the art, it would be obvious to use EHD as similar results would be provided. Further, with regard to hindsight, the Examiner has not utilized Applicant's specification to make the rejections, and hence, no hindsight is found. Moreover, arguments implying the need for specific motivation are no longer considered by the Office, in light of KSR v. Teleflex, which specifically holds that specific motivation is not required.

Applicant argues that Claim 12 provides a benefit which provides patentability over the Art of record, such that it would not be obvious, because the methods lower the noise associated with the method, thereby not startling the animals (pp. 12-13, paragraph bridging).

Such is not persuasive. If such Claim limitation provides the patentability, why is it not in the independent claims? Second, there is nothing in the Art cited to exclude the use. Third, Applicant's aversion that this is a problem fails to demonstrate that the claim is not obvious. I.e., the Art cited does not demonstrate that the noise associated with application is a problem. Hence, the noise associated would not be taken to be a problem in the first place, such that the Artisan would not be motivated to combine the references.

Art Unit: 1633

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, II F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 645 (CCPA 1962).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January I, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

As there are many rejections under this category, the rejections will be further explained after a summary of each rejection.

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 5,655,517 in view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S. Patent No. 6,302,331 to Dvorsky.

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 5,813,614 in view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to

Art Unit: 1633

Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S. Patent No. 6,302,331 to Dvorsky.

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 5,915,377 in
view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to
Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to
Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S.
Patent No. 6,302,331 to Dvorsky.

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,105,571 in
view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to
Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to
Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S.
Patent No. 6,302,331 to Dvorsky.

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 24-26 of U.S. Patent No. 6,252,129 in
view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to
Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to
Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S.
Patent No. 6,302,331 to Dvorsky.

Art Unit: 1633

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,386195 in view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S. Patent No. 6,302,331 to Dvorsky.

Claims 1-33, 36-47, and 49-56 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-52 of U.S. Patent No. 6,595,208 in view of U.S. Patent Nos. 5,655,517 to Coffee, et al., 6,105,877 to Coffee, et al., 5,928,194 to Maget, and 4,334,504 to Matthews, and/or further in view of U.S. Patent Nos. 6,029,610 to Ramsey, 6,130,253 to Franklin, et al., and 6,201,017 to Sembo and or further in view of U.S. Patent No. 6,302,331 to Dvorsky.

As shown in the art rejections, the various aspects of the invention are already obvious, however, further, the various patents each claim specific EHD devices with particular characteristics. As such, it would have been obvious to modify the Art to provide the particular characteristics of any particular device claimed. Such is simply the substitution of a known part with an equivalent part for the predictable outcome of applying such substances topically to animals.

Response to Argument - Double-Patenting rejections

Applicant's argument of 12/7/07 has been fully considered but is not found persuasive.

Art Unit: 1633

Applicant argues that the patents either (i) do not teach transfermal delivery (ii) medicaments or (iii) teach uncharged particle delivery (pp. 13-14, paragraph bridging).

Such is not persuasive. As addressed above, the uncharged particles are generally formed during a mixing stage, and further the references teach control of the delivered charge. Further, as addressed above, with regard to the medicaments and transdermal delivery, the other articles provide the proper basis for substitution of the various substances.

Conclusion

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Kelly, Art Unit 1633, whose telephone number is (571) 272-0729. The examiner can normally be reached on M-F. 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Kelly, Ph.D. Examiner, USPTO, AU 1633 Patents Hoteling Program Mailbox 2C70, Remsen Building (571) 272-0729

/Robert M Kelly/ Acting Examiner of Art Unit 1633